

**CONSTRUCTION OF
CORONA CRUISER SHELTER BATTERY AND LIGHTING
IMPROVEMENTS**

PROJECT NO. 2017-30, NIB 19-008CA

SPECIAL PROVISIONS


SECTION R - ROADWAY

The following Special Provisions supplement and amend the Standard Specifications for Public Works Construction 2015 Edition (Greenbook). These Special Provisions have been arranged into a format that parallels the Greenbook.

Bidders with pre-bid inquiries regarding the Work covered in this Section should be directed to Gerardo Sanabria at (951) 279-3522.




Prepared By:

DocuSigned by:

52AE793FE9FD4D5...

9/18/2018

Date

Reviewed:

DocuSigned by:

3BFF2853FE29410...

9/18/2018

Date

SECTION R – ROADWAY PROVISIONS

Table of Contents

PART 2 - CONSTRUCTION MATERIALS.....	R-1
SECTION 201 – CONCRETE, MORTAR, AND RELATED MATERIALS	R-1
201-1 PORTLAND CEMENT CONCRETE	R-1
201-1.1.1 General.....	R-1
201-1.4.4 Hand Mixing.....	R-1
201-2 REINFORCEMENT FOR CONCRETE.	R-1
201-2.2 Steel Reinforcement.	R-1
201-2.2.1 Reinforcing Steel.	R-1
201-4 CONCRETE CURING MATERIALS.....	R-1
201-4.1.1 General.....	R-1
SECTION - 206 MISCELLANEOUS METAL ITEMS	R-1
206-7 STEEL PLATE COVERS.....	R-1
206-7.1 General.....	R-1
SECTION 214 – TRAFFIC STRIPING, CURB AND PAVEMENT MARKINGS, AND PAVEMENT MARKERS	R-2
214-4 PAINT FOR STRIPING AND MARKINGS.....	R-2
214-4.1 General.....	R-2
214-6 PAVEMENT MARKERS.	R-2
214-6.4 Retroreflective Pavement Markers.	R-2
214-6.4.1 General.....	R-2
214-7 ADHESIVES FOR PAVEMENT MARKERS.....	R-2
214-7.1 General.....	R-2
214-7.2 Epoxy Adhesives.	R-2
214-7.2.1 General.....	R-2
PART 3 – CONSTRUCTION METHODS.....	R-2
SECTION 300 – EARTHWORK.....	R-2
300-1 CLEARING AND GRUBBING.....	R-2
300-1.1 General.....	R-2
300-1.4 Payment.	R-3
SECTION 303 – CONCRETE AND MASONRY CONSTRUCTION.....	R-3
303-5 CONCRETE CURBS, WALKS, GUTTERS, CROSS GUTTERS, ALLEY INTERSECTIONS, ACCESS RAMPS AND DRIVEWAYS.	R-3
303-5.1.1 General.....	R-3
303-5.5.3 Walk.	R-3
303-5.5.4 Gutter.	R-4
303-5.5.5 Alley Intersections, Access Ramps, and Driveways.	R-4
303-5.9 Measurement and Payment.	R-4

SECTION 304 – METAL FABRICATION AND CONSTRUCTION..... R-4

304-1.4	STEEL STRUCTURES.....	R-4
304-1.4.1	Bus Shelter Structure/Benches Removal, Relocation and Installation.....	R-4
304-1.4.2	Bus Stop Post/Signs/Kiosk/Trash Receptacle Relocation and Installation.	R-4
304-1.4.3	Fiberglass/PCC Bus Stop Bench Relocation.....	R-5
304-2.1.4	Measurement and Payment.....	R-5

SECTION 308 – IRRIGATION SYSTEM INSTALLATION. R-5

308-5.1	GENERAL.....	R-5
	<i>Replace the first paragraph with the following:</i>	R-5
308-5.1	GENERAL.....	R-5

SECTION 313 – TEMPORARY TRAFFIC CONTROL..... R-6

313-1	GENERAL.....	R-6
313-1.1	General.....	R-6
313-1.2	Vehicular Traffic.....	R-7
313-1.3	Pedestrian Traffic.....	R-7
313-1.4	Bicycle Traffic.	R-7
313-1.5	Work in the Vicinity of Railroads.	R-7
313-1.6	Safety in Traffic.....	R-7
313-2	TRAFFIC LANES AND CLEARANCES.	R-8
313-2.1	General.....	R-8
313-3	TEMPORARY STRIPING AND PAVEMENT MARKINGS.....	R-9
313-3.1	Payment.	R-9
313-4	FLAGGERS.....	R-9
313-4.1	General.....	R-9
313-4.2	Payment.	R-9

PART 6 – TEMPORARY TRAFFIC CONTROL..... R-9**SECTION 600 – ACCESS R-9**

600-1	GENERAL.....	R-9
600-2	VEHICULAR ACCESS.....	R-10
600-2.1	Informational Project Sign.....	R-10
600-2.2	Public Notification.	R-10
600-3	PEDESTRIAN ACCESS.....	R-11
SECTION 601	WORK AREA TRAFFIC CONTROL.....	R-11
601-1	GENERAL.....	R-11
601-2	TRAFFIC CONTROL PLAN (TCP).	R-11
601-3	PAYMENT.....	R-14
601-4	Notification and No Parking Signs.....	R-14

PART 2 - CONSTRUCTION MATERIALS

All as provided in Part 2 of the Standard Specifications for Public Works Construction except as otherwise provided hereinafter.

SECTION 201 – CONCRETE, MORTAR, AND RELATED MATERIALS

201-1 PORTLAND CEMENT CONCRETE

201-1.1.1 General.

Insert the following as the second paragraph:

Contractor shall furnish the Engineer a copy of the mix design to be used and with legible certified weight-master's certificate for each load of PCC delivered to the work site. Portland Cement concrete delivered to the site having a water content and/or slump greater than that specified in the mix design shall be rejected and removed from the Work site.

201-1.4.4 Hand Mixing.

Insert the following after the first sentence:

Hand mixing concrete shall not be allowed except by prior permission from the Engineer. Prepackaged unmixed concrete shall not be allowed except by prior permission from the Engineer.

201-2 REINFORCEMENT FOR CONCRETE.

201-2.2 Steel Reinforcement.

201-2.2.1 Reinforcing Steel.

Replace the first sentence in the first paragraph with the following:

Unless otherwise specified, reinforcing steel, except longitudinal steel shall be Grade 60 billet steel conforming to ASTM A615.

201-4 CONCRETE CURING MATERIALS.

201-4.1.1 General.

Replace the first sentence in the fourth paragraph with the following:

Unless otherwise shown on the Plans, Type 2, white pigmented curing compound shall be applied to all finish concrete work immediately after the finishing work has been completed.

SECTION - 206 MISCELLANEOUS METAL ITEMS

Add the following subsection:

206-7 STEEL PLATE COVERS.

206-7.1 General.

Steel plate covers shall conform to Table 206-7.1 (A) and to City of Corona Standard Plan No. 151.

TABLE 206-7.1 (A)

Trench Width¹	Minimum Plate Thickness
10 inches (25 cm)	½ inch (13 mm)
1 foot-11 inches (58 cm)	¾ inch (19 mm)
2 foot-7 inches (80 cm)	7/8 inch (22 mm)
3 foot-5 inches (104 cm)	1 inch (25 mm)
5 foot-3 inches (160 cm)	1 ¼ inch (32 mm)

1. For spans greater than 5 feet - 3 inches (160 cm), a structural design by a Registered Structural

or Civil Engineer shall be submitted and approved in accordance with 2-5.3. The steel plate covers shall be designed to withstand an HS20-44 AASHTO Bridge Loading or as specified on the Plans.

Steel plates shall have a surface that is roughened, taped, coated or otherwise modified to provide the non-skid surface shown on the Plans or specified in the Special Provisions.

SECTION 214 – TRAFFIC STRIPING, CURB AND PAVEMENT MARKINGS, AND PAVEMENT MARKERS

214-4 PAINT FOR STRIPING AND MARKINGS.

214-4.1 General.

Insert the following after the last paragraph:

All striping and pavement marking shall be thermoplastic ALKYD BINDER unless specified otherwise on the Plans. Paint, when approved in lieu of thermoplastic material, for traffic striping and pavement markings shall be manufactured by Bauer Coatings Chemicals Division or approved equal. Colors shall be white (1039 A9), yellow (1040 A9), or black (11 A9), as required and shall be approved by the Engineer prior to application.

214-6 PAVEMENT MARKERS.

214-6.4 Retroreflective Pavement Markers.

214-6.4.1 General.

Replace the last sentence of the first paragraph with the following:

The exterior surface of the shell shall be smooth and contain 1 or 2 methyl methacrylate prismatic faces of the color shown on the Plans.

214-7 ADHESIVES FOR PAVEMENT MARKERS.

214-7.1 General.

Replace the last sentence of the first paragraph with the following:

The type of adhesive to be applied shall be as specified in the Special Provisions.

214-7.2 Epoxy Adhesives.

214-7.2.1 General.

Replace the first sentence with the following:

Epoxy adhesive shall be rapid-set.

Add the entire following Section:

PART 3 – CONSTRUCTION METHODS

All as provided in Part 3 of the Standard Specifications for Public Works Construction except as otherwise provided hereinafter.

SECTION 300 – EARTHWORK

300-1 CLEARING AND GRUBBING.

300-1.1 General.

Insert the following after the second paragraph:

Clearing and Grubbing shall also include but not be limited to:

- a) Removing any existing plant material (including roots), rocks, concrete, boulders, asphalt, and any other trash or debris to a depth of 12 inches below top of curb elevations.

- b) Protection of all existing improvements within the Project area, including all materials, temporary fencing, and labor required to protect existing improvements.

Removal shall be disposed of in a legally acceptable manner outside of right-of-way. All green waste material shall be disposed of at a recycling center. Contractor shall provide weight tickets as evidence of disposal of all green waste.

300-1.4 Payment.

Replace the first sentence with the following:

Payment for "CLEARING AND GRUBBING" shall be at the lump sum Bid price and shall include full compensation for subgrade preparation, material, placement, removal, labor, tools, equipment, and incidental necessary to do the work involved thereof, complete, in place and accepted.

SECTION 303 – CONCRETE AND MASONRY CONSTRUCTION

303-5 CONCRETE CURBS, WALKS, GUTTERS, CROSS GUTTERS, ALLEY INTERSECTIONS, ACCESS RAMPS AND DRIVEWAYS.

303-5.1.1 General.

Replace the second paragraph with the following:

PCC curbs and gutters shall be constructed in accordance with Standard Plan 135, 136, 137, and/or 138, in place with the exception that expansion joints shall not be at more than 20-foot intervals and weakened plane joints shall be at 10-foot intervals. PCC curbs and gutters, sidewalks, cross gutters, driveways and access ramp work shall satisfy the following as applicable:

- a) Formwork shall be approved by the Engineer before placing PCC.
- b) Expansion joint material shall be pre-molded asphalt expansion joint filler and shall penetrate and be continuously one piece through the curb and gutter.
- c) Shapes and sizes of PCC curbs and gutters shall be as indicated on the drawings and the concrete shall be placed in such a manner as to prevent distortion of the forms and shall be vibrated as required to ensure an acceptable product.
- d) As soon as the concrete will allow, Contractor shall strip the forms and trowel smooth the curb face and top. Contractor shall tool the edges of expansion joints with an approved ½-inch-edging tool.
- e) The completed curb and gutter shall be protected from damage until accepted.
- f) Where any curb and gutter requires repair before acceptance, the repair shall be made by removing and replacing the entire curb and gutter between joints and not by refinishing the damaged portion.

303-5.5.3 Walk.

Insert the following before the first paragraph:

Sidewalks/bus stop landing area shall be constructed in conformance with the Standard Plan 142.

Exterior walkways and flatwork shall be directly supported on 90% compacted, on-site silty sandy soil. Subgrade soils underlying in slab areas shall be maintained in a moist condition until just prior to the placing of concrete slabs.

The sidewalk surface shall not vary more than 0.02 feet from a 10-foot straightedge except at grade changes. The finished surface shall be free of humps, sags, blemishes, or other irregularities. All sidewalks shall be a minimum of 4 inches thick except at the driveways where

the sidewalks shall be a minimum of 6 inches thick for single family residential areas and 8 inches thick for all other areas.

303-5.5.4 Gutter.

Insert the following as the first sentence of the first paragraph:

Cross gutters and spandrels shall be constructed in accordance with the Standard Plan 145. Prior to acceptance of the valley gutter constructed by the Contractor, a flow test shall be conducted by the Contractor in the presence of the Engineer. Any new work found to be defective shall be repaired or replaced by the Contractor in accordance with 303-5.7.

303-5.5.5 Alley Intersections, Access Ramps, and Driveways.

Delete "access ramps" from the first paragraph and add the following as the second paragraph:

Curb ramp shall be constructed per design drawings and shall also conform to Standard Plan 146 or 147. Curb face depressions shall conform to the details of the Plans, ADA and Title 24, these Specifications or whichever is the most stringent or as directed by the Engineer. Measurement for this item shall be from the beginning of the curb return to the end of curb return.

303-5.9 Measurement and Payment.

Insert the following as the first sentence:

Payment for concrete curb and gutter, retaining curb, sidewalk/bus stop landing area, driveways, pedestrian access ramps (including detectable warning surface, curbs, and retaining curbs), detectable warning surface installed on existing access ramps, cold milling existing gutter lips shall be at the Contract Unit Price shown on the Bid and shall include full compensation for subgrade preparation, base material, placement, materials, all labor, tools, equipment and incidentals necessary to do all of the work involved thereof, complete in place and accepted.

SECTION 304 – METAL FABRICATION AND CONSTRUCTION

Insert the following section:

304-1.4 STEEL STRUCTURES.

replace the last sentence with the Following:

Members shall be painted, powder coated or galvanized as shown on the Plans.

304-1.4.1 Bus Shelter Structure/Benches Removal, Relocation and Installation.

The bus shelter structure will require to be removed from its current location on Fullerton Avenue south of Magnolia Avenue and to be transported to and installed at bus stop located near the northwest corner of the Magnolia Avenue and Fullerton Avenue (refer to Plan 1-A for locations details). The work to remove, relocate, and install the bus shelter and its two benches, is the sole responsibility of Contractor. The shelter and its two (2) benches removal includes removing the anchors securing the shelter and its two benches and then cut and/or grind all remaining anchors as to be leveled with PCC pad's surface. Contractor will be responsible for loading (from its current location), transporting to new location, and unloading the shelter and its two (2) benches at the proposed location near the northwest corner of the Magnolia Avenue and Fullerton Avenue bus stop; in addition, Contractor will be responsible to install and secure the shelter and benches with concrete anchors per Plan 1-A (Sheet 2 of 6) and per Appendix "F-1".

304-1.4.2 Bus Stop Post/Signs/Kiosk/Trash Receptacle Relocation and Installation.

Bus stop post, signs, kiosk, and trash receptacle shall be installed as specified in the Plans and Appendix "E". Installation of bus stop post/signage/kiosk/trash receptacle could require a new sign-post and additional or replacement hardware; these items shall be supplied by the Contractor. If required, City will provide Corona Cruiser signs and kiosk (notify Project Engineer).

304-1.4.3 Fiberglass/PCC Bus Stop Bench Relocation

The fiberglass/PCC bus stop bench will require to be removed from its current location near the northwest corner of Magnolia Avenue and Fullerton Avenue and to be transported and installed at the bus stop located near the southwest corner of the 6th Street and Vicentia Avenue (refer to Plan 1-A for locations details). The work to remove, relocate, and install the bus stop fiberglass/PCC bench, is the sole responsibility of Contractor. The fiberglass/PCC bench removal includes removing the bench and Contractor will be responsible for loading (from its current location), transporting to new location, and unloading and placing the bench at the bus stop located near the southwest corner of 6th Street and Vicentia Avenue, refer to Sheet 6 of 6 of the Plans for locations.

304-2.1.4 Measurement and Payment.

Replace the first paragraph with the following:

Labor, materials, tools, equipment and incidentals necessary for removing, relocating, and installing the bus shelter and its two (2) benches and fiberglass/PCC bench, relocation and installation of bus stop post/signs/ kiosk/trash receptacle work shall be considered as included in the various Contract bid item prices and shall include full compensation necessary to complete all work involved thereof in place and no additional compensation shall be allowed therefore.

Bus Shelter Structure/Benches Removal, Relocation and Installation (includes the removal and reinstallation of two benches), Bus Stop Post/Signs/Kiosk/Trash Receptacle Relocation and Installation, Fiberglass/PCC Bus Stop Bench Relocation, will be measured and paid by the Contract Bid Item. Contractor will provide all necessary concrete anchors to install the shelter and its two benches. Labor, materials, tools, equipment and incidentals necessary for removing, relocating and installing the shelter, its benches shall be included in the Contract Bid Items as full compensation necessary to complete all of the work involved thereof in place and no additional compensation shall be allowed therefore.

Insert the following sections:

SECTION 308 – IRRIGATION SYSTEM INSTALLATION.**308-5.1 GENERAL.**

Replace the first paragraph with the following:

Contractor shall furnish all necessary materials, labor, and equipment required to complete the work of removing interfering portions of the irrigation system; repairing and installing new portions of irrigation system to connect to existing water services and make any necessary changes to existing irrigation of remaining vegetation and not spray water or bus stop pad.

308-5.1 GENERAL.

Add the following after the first sentence:

The Lump sum or unit price shown in the Bid shall include full compensation to complete Removals, complete installation of in-kind irrigations components and maintain the landscaping and irrigation work shown on the Plans and in the Specifications, including all materials, labor, equipment, samples, testing, manuals, and guarantees.

Add the following at the end of the section:

The City of Corona has set up very specific criteria in which to evaluate the performance of the Contractor on a weekly basis. If performance by the Contractor is deficient the City reserves

right to subtract cost from the monthly billing and/or hire another contractor to provide the service and deduct the expense from the contract retention. Since it is difficult to quantify and assess the value to every aspect of the work, the City shall implement a standard \$100 cost per incident. The following describes deficiencies:

- a) Lack of compliance to specifications (i.e., failure to adequately mow, edge, litter pick-up sweep/rake, weed, prune, remove dead plant material, etc.).
- b) Failure to provide specific reports or to falsify reports.
- c) Failure to supply adequate equipment, labor or supervision.
- d) Failure to repair irrigation deficiencies in the allotted time frame.
- e) Failure to comply with schedules. Variances may be approved by request. Delays in part to acquisition or adverse weather conditions will be taken into consideration.

SECTION 313 – TEMPORARY TRAFFIC CONTROL

313-1 GENERAL.

313-1.1 General.

Contractor shall install and maintain all required traffic control devices, provide flaggers throughout the Work area as shown in the WATCH, TCP, or as specified in these Special Provisions and promptly remove the traffic control devices when they are no longer required. The Work area shall include the Work site and the areas required for advance signing and transitions to and from the traffic control zone. Unless otherwise provided in these Special Provisions, traffic shall be permitted to pass through the Work area in conformance with the WATCH, or TCP. Unless otherwise specified in the WATCH, TCP, or these Special Provisions, the Work shall be performed in half the roadway at one time. One half shall be kept open and unobstructed until the opposite side is ready for use. If one-half a street is being improved, the other half shall be conditioned and maintained as a detour.

Contractor engaged in setting up or removal of traffic control zones shall be properly licensed. All personnel engaged in setting up or removal of traffic control zones, including flaggers shall be properly trained.

Traffic control activities and milestones shall be shown as activities on the Contractor's construction schedule in conformance with 6-1.

Whenever the term "hours of darkness" is used in the Specifications, it shall be deemed to mean the hours of darkness as defined in Division 1, Section 280, of the California Vehicle Code.

Contractor shall patrol and monitor the Work site to ensure that all traffic control devices are in place and operating at all times. Any traffic control devices that are displaced or not in an upright position shall be replaced or restored to their original location in an upright position by the Contractor. The Contractor shall ensure that all traffic control devices are repaired, replaced, and cleaned as necessary to preserve their appearance and visibility. Traffic control devices that are damaged from any cause during the progress of the Work shall be repaired, including painting if necessary, or replaced by the Contractor at the Contractor's expense.

Any action on the part of the Engineer in directing the Contractor's attention to any inadequacy of the required devices and services or any action of the Agency to alleviate the Contractor's inadequacies shall not relieve the Contractor from its responsibility for public safety or abrogate its obligation to provide and maintain the traffic control devices and services. If the Contractor fails to provide and maintain these devices and services and the Agency is required to alleviate said condition, the total charges of labor, equipment and materials including overhead and transportation, accrued by the Agency for such work will be deducted from any monies due or that may become due to the Contractor.

313-1.2 Vehicular Traffic.

Grading operations, pavement milling, roadway excavation and fill construction shall be conducted by the Contractor in a manner to provide a reasonably satisfactory surface for traffic. When rough grading is completed, the roadbed surface shall be brought to a smooth, even condition satisfactory for traffic.

Pavement disruptions 1½ inch or greater shall have a beveled edge of 4 horizontal to 1 vertical.

313-1.3 Pedestrian Traffic.

Safe and adequate pedestrian zones and public transportation stops, as well as pedestrian crossings of the Work site at intervals not exceeding 300 feet shall be maintained unless otherwise approved by the Engineer. When sidewalks are closed an alternate walkway shall be provided. Pedestrians shall not be directed into direct conflict with vehicles operating within the Work site or other traffic. Where it is necessary to divert pedestrians into the parking lane or a street, barricading or temporary barriers conforming to 215-5.6 or 215-5.7 as specified in these Special Provisions shall be provided to separate the pedestrian walkway from the adjacent traffic lane.

If required by the Work, the Contractor shall close only one crosswalk at a time at intersections having 4 crosswalks. If the Work requires closure of 2 or more crosswalks at an intersection, the Contractor shall obtain approval from the Agency before implementation of the closure. Agency approval shall be obtained before closing any crosswalks at intersections having fewer than four crosswalks. The request for approval to close cross walks shall be submitted to the Engineer per 2-5.3. Pavement surface disruptions in areas subject to pedestrian traffic of ½-inch or greater shall have a beveled edge of 12 horizontal to 1 vertical in conformance with ADA.

All traffic control devices and zones shall conform to ADA requirements. Walkways in Work sites shall be maintained at least 4 feet in width. Obstructions within walkways shall be illuminated during hours of darkness. Minimum vertical clearance to any obstruction within the walkway shall be 7 feet.

313-1.4 Bicycle Traffic.

When performing Work in any street or sidewalk attention shall be directed to the probability of encountering bicycle traffic. Roadways adjacent to Work sites particularly shoulders, parking or bike lanes, or routes shall be kept free of obstructions or other hazards to bicyclists.

When performing Work on a street with a designated bike lane or route special attention needs to be given to bicyclists. Pavement surface disruptions in marked bike lanes or routes of 1/2 inch or more shall have a beveled edge of 8 horizontal to 1 vertical. In addition signs indicating the condition of the surface of the pavement shall be posted in accordance with the TCP or WATCH. If the pavement surface disruptions are not beveled and signs posted, the bicycle lane or route shall be closed.

When a bicycle lane or route is closed, signing shall be installed to terminate the bike lane or route and advise motorist and bicyclists that the previously separated bicycle traffic will be in the vehicular traveled way. Barricades used at the terminus or the closure shall be closely spaced to prevent physical passage by bicyclists into the closed bicycle lane or route. Warning tape may be used to close the gap between barricades to keep bicyclists out of the closed bicycle lane or route.

313-1.5 Work in the Vicinity of Railroads.

When a street-rail grade crossing exists within or in the vicinity of the Work site, work area traffic control shall be as shown on the TCP or WATCH and as specified in these Special Provisions. In no case shall lane restrictions, flagging or other operations be performed in a manner that would cause traffic to stop on the railroad tracks. Whenever the Work causes traffic to backup across an active railroad track, a flagger shall be provided.

313-1.6 Safety in Traffic.

Contractor's attention is directed to the importance of safety when working in proximity to traffic. The Contractor shall take all precautions and establish such traffic control as is necessary to properly provide for the safety of all personnel and equipment on the Work site. Contractor shall comply with all the requirements of OSHA and CAL/OSHA.

Unusual conditions may arise on the Work which will require that immediate and unusual provisions be made to protect the public from danger or loss or damage to life and property, due directly or indirectly to the prosecution of the Work, and it is part of the service required of the Contractor to make such provisions and to furnish such protection.

Contractor shall use such foresight and shall take such steps and precautions as his operations make necessary to protect the public from danger or damage, or loss of life or property, which would result from the interruption or contamination of public water supply, irrigation, or other public service or from the failure of partly completed work.

Whenever, in the opinion of the Engineer, an emergency exists against which the Contractor has not taken sufficient precaution for the safety of the public or the protection of utilities or of adjacent structures or property which may be injured by process of construction on account of such neglect; and whenever, in the opinion of the Engineer, immediate action shall be considered necessary in order to protect public or private personnel or property interests, or prevent likely loss of human life or damage on account of the operations under the Contract, then and in that event the City may provide suitable protection to said interest by causing such work to be done and material to be furnished as, in the opinion of the Engineer, may seem reasonable and necessary.

The cost and expense of said labor and material together with the cost and expense of such repairs as may be deemed necessary shall be borne by the Contractor, and if the Contractor does not pay said cost and expense upon presentation of bills therefor, duly certified by the Engineer, then said cost and expense will be paid by the City and shall thereafter be deducted from any amounts due, or which may become due to said Contractor. Failure of the City, however, to take such precautionary measure shall not relieve the Contractor of full responsibility for public safety.

The foregoing provisions are in addition to and not in limitation of any other rights or remedies available to the City.

313-2 TRAFFIC LANES AND CLEARANCES.

313-2.1 General.

Traffic lanes and clearances shall be as shown on the TCP, WATCH, or as specified in these Special Provisions. However, the Contractor shall provide and maintain minimum traffic lanes as specified in 314. Unless otherwise approved by the Engineer, when only one lane is provided in each direction, wider lanes shall be provided to separate opposing traffic and to accommodate turning movements. A minimum 18-foot lane shall be provided if parking is allowed.

Clearances to obstructions shall be as follows:

- a) 2 feet from vertical obstructions such as curbs, guardrails or temporary barriers.
- b) 10 feet from the edge of the traveled way to fixed objects, (utility poles, street lights, traffic signals poles, trees, large sign supports, etc.) unprotected by barriers. When the minimum clearance to fixed objects cannot be provided, temporary barriers shall be placed to protect the fixed object. On low speed local streets, and at the Contractor's option, temporary AC curb may be used in lieu of temporary barriers.
- c) 5 feet from any excavation or drop off of 2 inches or greater to allow placement of temporary barriers to keep traffic out of the Work site and minimize traffic surcharge on the excavation. When the 5-foot clearance to an excavation or drop off cannot be maintained, temporary barriers shall be placed to separate vehicles and bicycles from the excavation or drop off.

Bicycle Lanes shall have a clear width of not less than 5 feet. Any Bicycle Lane less than 5 feet wide shall be closed. If the Work site is in a Bike Path and requires the Bike Path be closed, a detour Bike Path, Lane or Route, with appropriate signage, shall be provided.

If the Engineer determines that it is necessary to decrease the minimum distances specified herein to allow for the prosecution of the Work, the Contractor shall provide all protective devices required by the Engineer to adequately protect the public and/or its workers.

313-3 TEMPORARY STRIPING AND PAVEMENT MARKINGS.

Temporary striping/markings shall be as shown per WATCH or on TCP and as specified in these Special Provisions. Removal shall conform to 314-2 and these Special Provisions. Immediately following the removal of temporary striping and pavement markings, the Contractor shall remove all residue from the pavement surface by power sweeping and thoroughly cleaning the area. Removal and cleaning shall be completed before relocation of new striping is started.

313-3.1 Payment.

Full compensation for the installation and removal of temporary traffic striping and pavement markings, shall be considered as included in the Contract Unit price Bid for the appropriate item(s) bid for "Traffic Control".

313-4 FLAGGERS.

313-4.1 General.

The flagger's sole duties shall consist of directing the movement of public traffic through or around the Work site. Personnel selected to be flaggers shall be trained in the fundamental of flagging traffic before they are assigned to that responsibility. Flaggers shall also be properly equipped with an 18-inch x 18-inch Stop/Slow sign paddle. When used at night, the sign paddle shall be retroreflective. Under emergency conditions the flagger may use a flashlight and hand signals to direct traffic.

A W20-1 sign and a symbol sign of a flagger (W20-7a) shall be placed as far ahead of the flagger as practical. For high speed situations a "Prepare to Stop" (W3-4) sign should also be used. Flaggers shall be located such that approaching traffic will have sufficient distance to stop at the intended stopping point. From sunset to sunrise flagger stations shall be illuminated such that the flagger will be clearly visible to approaching traffic.

Flaggers shall be provided with high visibility clothing. Flaggers shall wear fluorescent orange or fluorescent strong yellow-green colored warning garments such as vests, jackets, or shirts. Rainwear, when worn, shall be orange, strong yellow-green, or yellow. During hours of darkness, flaggers shall be outfitted with garments of retroreflective material that shall be visible at a minimum distance of 1,000 feet.

Retroreflective material added to the clothing shall have a minimum of one horizontal stripe around the torso. White outer garments with retroreflective material may be worn during the hours of darkness in lieu of colored vest, jackets and/or shirts.

313-4.2 Payment.

The cost of furnishing flaggers, including transporting flaggers to provide for passage of traffic through the Work site shall be considered as included in the lump sum Bid and no additional compensation shall be allowed therefor. Payment will be prorated on a monthly basis over the duration of the Contract or until all flagging operations are complete.

:

PART 6 – TEMPORARY TRAFFIC CONTROL

SECTION 600 – ACCESS

600-1 GENERAL

Add the following after the first sentence:

The Contractor shall provide continuous, unobstructed access for all existing access roads, paved or unpaved, within and through the Work site unless otherwise specified by the Engineer. Existing access roads may be rerouted to avoid construction activities, where needed, upon approval of the Engineer.

600-2 VEHICULAR ACCESS

Add the following after the first paragraph:

Adequate traffic control devices shall be placed to direct traffic entering or exiting driveways to the correct travel lanes.

The Contractor shall cooperate with the various parties involved in the delivery of mail and the collection and removal of trash and garbage to maintain existing schedules for these services. If necessary, the Contractor may move residential trash cans to locations accessible for collection and then return the trash cans to the original place of residence to be picked by the resident. Residents shall be responsible for marking trash cans with their home address.

Roadway excavation and fill construction shall be conducted by the Contractor in a manner to provide a reasonable satisfactory surface for traffic. Unless otherwise authorized, work shall be performed in only-half the roadway at one time. One half shall be kept open and unobstructed until the opposite side is ready for use. If only one-half a street is being improved, the other half shall be conditioned and maintained as a detour.

Whenever the Contractor's operations temporarily require one-way traffic or create a condition not accepted by the Engineer, the Contractor shall provide and station competent flaggers whose sole duties shall consist of directing the movement of traffic through or around the Work.

Insert the following subsections:

600-2.1 Informational Project Sign.

The Contractor shall furnish and install Informational Project Signs per Bid schedule constructed on 4-foot by 8-foot plywood or metal and posted within the parkway adjacent to the street. Signs shall be mounted on two posts at least 7 feet above the pedestrian travel way. Signs and sign posts shall be located within the public right-of-way and may not hinder or obstruct driver's line of sight. Placement shall not violate or compromise current ADA access requirements. The wording and size of the letters shall be approved by the Engineer prior to fabrication. Placement shall be approved by the Engineer prior to installation. Refer to Standard Plan 522 and sample provided in Appendix B.

Informational Project Signs shall be posted at least 3 Days prior to start of construction and remain posted until the final job walk is completed. The signs shall then be removed and properly disposed. Contractor shall be responsible for the maintenance of these signs until removed. Full compensation for the informational project signs, including construction, deployment, maintenance, removal, and furnishing of all necessary labor, equipment, materials, and all other related costs shall be considered as included in the Lump Sum Bid Price for "Informational Project Sign." Payment for the Informational Project Signs shall be paid under the Contract Lump Sum Price at 90% for the completed installation of the signs and 10% for the removal and disposal of the signs upon completion of the Work.

600-2.2 Public Notification.

The Contractor shall prepare public notification fliers in English and Spanish per Bid schedule. Fliers shall notify residents and businesses of the Work and include information describing the Work, how it may affect them and contact information of City and Contractor personnel responsible for the Work. The Engineer will provide the contact information for the City to be included on the flier at the pre-construction meeting. Contractor shall submit draft versions of the Rider Alert in English and Spanish to the Engineer for review and approval at least 72 hours prior

to starting the Work. Contractor shall distribute up to 100 fliers per bus stop and up to a 200-foot radius centered at the bus stop with construction Work as appropriate to provide advance notification of the Work to residents and businesses adjacent to or affected by the Work. Refer to sample provided in Appendix A.

Full compensation for the public notification shall include all necessary labor, equipment, materials, and all other related costs for preparation, copying, and distribution shall be considered as included in the Lump Sum Price Bid for "Public Notification."

600-3 PEDESTRIAN ACCESS

Add the following before the first paragraph:

Alternative routes for the pedestrians and bicyclists along the Project site shall be clearly marked and safety of those that utilize the path shall be considered at all times. This includes the use of proper lighting (where appropriate), fencing/shielding, proper storage of equipment and construction supplies, covering loose piles of soil, silt, clay, sand debris, or other earthen material so as to eliminate any discharge onto the existing pathway or temporary pathway, and immediately hosing down/cleaning such areas of the existing pathway or temporary pathway that have been affected by construction debris or sedimentation from the Project.

SECTION 601- WORK AREA TRAFFIC CONTROL

601-1 GENERAL

601-2 TRAFFIC CONTROL PLAN (TCP).

Add the following after the last paragraph:

The Contractor shall provide traffic control and shall submit a traffic control plan and schedule for approval by the City when required by the scope of construction. Key traffic control schedule activities and milestones shall be included in the Contractor's construction schedule as specified in 6-1.

In general, when re-striping or when construction affecting an existing roadway is necessary, a traffic control plan is required. A traffic control plan will also be required under the following conditions:

- d) Work within the roadways of:
 - Magnolia Avenue and Fullerton Avenue between 9:00 AM and 2:00PM
 - Project Location/Plan 1-A
 - Fullerton Avenue south of Magnolia Avenue between 9:00 AM and 2:00PM
 - Project Location/Plan 1-B
- e) When traffic is to be diverted to the left of a double yellow centerline for overnight construction, unless otherwise directed by the Engineer.
- f) When the Work area is an intersection or adjacent thereto and requires a transition through the intersection.
- g) When a traffic lane is obstructed for more than three consecutive nights, unless otherwise approved by the Engineer.
- h) When traffic volumes dictate that the minimum number of traffic lanes cannot be maintained with the existing channelization.
- i) In other unusual situations where traffic and physical conditions such as speed, restricted visibility, grade, or alignment require special treatment.
- j) When directed by the Agency or required by the Special Provisions.

The requirements set forth in the current CA MUTCD Part 6 Temporary Traffic Controls shall govern the design of the proposed traffic control. Traffic control plans shall be prepared and stamped by a Civil or Traffic Engineer registered by the State of California.

The traffic control plan shall be drawn to a 1" = 40' scale on common size sheets, either 8 ½" x 11", 8 ½" x 14", 11" x 17", or standard 24" x 36" plan sheets as dictated by the length of the Project. The total length of the Project shall be shown including the advance signing and striping transitions in advance of the Work area; and existing striping, signing and raised medians, if any. The sheets shall display the Project name (CORONA CRUISER SHELTER BATTERY AND LIGHTING IMPROVEMENTS); phase identification; name of firm preparing the plan; plan; name and stamp of the Civil or Traffic Engineer; approval block for the Agency or Agencies involved; north arrow; sheet number; and number of sheets comprising the traffic control plans. General notes and symbol definitions shall be included when required. Adequate dimensioning shall be provided to allow for Agency checking and proper field installation.

Simple daytime lane closures may be installed in accordance with the CA MUTCD Part 6 Temporary Traffic Controls without a plan submittal when approved by the City. However, a traffic control sketch may be required by the City for more complex temporary daytime installations. The traffic control sketch shall display the phase identification and the name of the designer, firm, and the Project.

In no case shall traffic be diverted from the existing traveled way without prior approval of the Engineer. Detour striping will not be permitted on any finish course of asphalt concrete pavement constructed on the Project. Temporary striping shall be detour grade traffic tape in this case.

In order to facilitate the flow of traffic during the Contract duration, the City reserves the right to extend the limits of the Project to include any areas where removal of striping or marking, construction of detour pavement, or signing and delineating is deemed necessary by the Engineer.

The Contractor will be responsible for obtaining an Encroachment Permit and Street Closure Permit prior to the start of any work. This Street Closure Permit will identify all sign requirements, work hours and other conditions as may be necessary to minimize inconvenience to motorists and businesses. Personal vehicles of the Contractor's employees shall not be parked on the traveled way at any time.

A detailed TCP, approved by the Engineer, will be required for all construction work within any public right-of-way. No reduction of the traveled way width shall be permitted on any City street **before 8:30 AM or after 5:00 PM** during weekdays, or anytime on weekends or holidays, or when active work is not being done, unless prior authorization to do so is granted by the Engineer.

The Contractor shall notify the Police, Fire, Traffic, and Public Works Departments of the City of Corona at least 48 hours in advance of closing, or partially closing, or of reopening, any street, alley or other public thoroughfare, and shall comply with their requirements. If the telephone numbers herein below are changed, the Contractor is not relieved of the responsibility of notifying said departments.

The following telephone numbers are listed to assist the Contractors in compliance with these requirements:

- Fire Department (951) 736-2221
- Police Department..... (951) 736-2333
- Public Works Department (Traffic & Engineering)..... (951) 736-2261
- Public Works Department (Transportation)..... (951) 279-3522

All traffic control and safety devices, equipment and materials, including but not limited to cones, delineators, flashing warning lights, barricades, high level warning devices (flag trees), flags, signs, markers, portable barriers, flashing arrow signs, markings and flagging equipment, shall be provided and maintained in "like new" condition.

The Contractor shall furnish and properly install, construct, erect, use and continuously

inspect and maintain, 24 hours per day, 7 days per week, all said devices, equipment and materials, and all temporary and permanent pedestrian and driving surfaces as necessary to provide for the safety and convenience of and to properly warn, guide, control, regulate and channelize Project workers and the public beyond said limits as necessary to include areas affecting or affected by the Work, from the start of Work to the completion of the Work.

High level warning devices (flag trees) are required at all times for any work being performed within the roadway, unless otherwise specifically authorized by the Engineer. Flashing arrow boards will be required on all streets with 4 or more lanes (2 in each direction) or as deemed necessary by the Engineer.

All barricades shall be equipped with flashing warning lights when installed during hours of darkness and all traffic cones shall be no less than 28 inches in height except that shorter cones, 12 inches high or higher, may be used during striping maintenance operation where the only function of the cones is to protect the wet paint from traffic.

Except as otherwise authorized by the Engineer, 2-way vehicular traffic shall be maintained at all times within two 11-foot wide lanes or 13-foot wide lane when adjacent to the curb.

Properly trained and experienced flaggers shall be provided to direct traffic when said traffic is to be interrupted for short periods of time, when 2-way traffic is to be reduced to one-way traffic at such time as is necessary to safely pass the traffic through or around the Work area, and when so directed by the Engineer.

Any traffic control and safety devices and equipment being used which becomes damaged, destroyed, faded, soiled, misplaced, vandalized, worn out, inoperative, lost or stolen shall be promptly repaired, refurbished and/or replaced, and any traffic control and safety devices and equipment being used which are displaced or not in an upright position from any cause, shall be promptly returned or restored to their proper position.

An unobstructed view of all signs and warning devices including, but not limited to, stop signs, stop ahead signs, street name signs and other regulatory, warning and construction signs, markers and warning devices shall be maintained at all times. No trucks or other equipment or materials shall be stopped, parked or otherwise placed from the view of vehicular and/or pedestrian traffic to which it applies.

When entering or leaving roadways carrying public traffic, the Contractor's equipment, whether empty or loaded, shall yield to said public traffic at all times, except where the traffic is being controlled by Police officers, Fire officers, or at traffic signalized intersections.

Stockpiling and/or storage of materials on any public right-of-way or parking areas will not be allowed without specific permission of the Engineer. Materials spilled along or on said right of way or parking area shall be removed completely and promptly. All stockpile and/or storage areas shall be kept in a safe, neat, clean and orderly fashion, and shall be restored to equal or better than original condition upon completion of the Work.

Work involving the closure of, or partial closure of existing streets, and where vehicular access to the abutting property must be restricted, shall be so selected, arranged and scheduled that the persons requiring access to said abutting property and/or residents along said streets affected will be able to park within a reasonable distance of not more than 500 feet from their homes and/or destination; and in addition, no two adjoining streets shall be closed at the same time, except as otherwise authorized by the Engineer.

When work has been completed on a particular street or has been suspended or rescheduled and said street is to be opened to vehicular traffic, all equipment, "NO PARKING" signs, other obstructions and unnecessary traffic control devices and equipment shall be promptly removed from the street, except as otherwise authorized or directed by the Engineer. This will include the placement of temporary asphalt paving in vehicular travel lanes and/or pedestrian walkways, as appropriate. Temporary traffic striping, when applicable, shall be applied prior to opening any newly paved area to traffic. This includes lane and centerlines. The Contractor shall also remove all utility markings identifying utility locations specifically marked for the Work when work has been

completed on a particular street.

Should the Contractor be neglectful, negligent or refuse, fail or otherwise be unavailable to promptly, satisfactorily and fully comply with the provisions specified and referred to hereinabove, the City reserves the right to correct and/or mitigate any situation, which in the sole opinion of the Engineer constitutes a serious deficiency and/or serious case or non-compliance, by any means at its disposal at the Contractor expense, and in the case of a contract City project, to deduct the cost therefor from the Contractor's progress and/or final payments. Such corrective actions taken by the City shall not reduce or abrogate the Contractor's legal obligations and liability for proper traffic control and safety measures and shall not serve to transfer said obligations and liability from the Contractor to the City or the City's agent.

Violations of any of the above provisions and/or provisions of the referenced publications, unless promptly and completely corrected to the satisfaction of the Engineer, shall, at the sole discretion of the City, be grounds for termination of the Contract or shut down or partial shut-down of the Work without compensation to the Contractor, or liability to the City, all as prescribed by contractual obligations or State law, whichever is applicable.

Should the Engineer point out the inadequacy of warning devices or should the Engineer approve the location of warning devices, such action shall not relieve the Contractor of responsibility for public safety, nor abrogate the Contractor's obligation to furnish and pay for these devices. Should it be determined, during hours other than work hours and the Contractor is unavailable, that the warning devices are inadequate; the City may furnish and erect such additional devices as may be necessary.

601-3 PAYMENT

Replace the first sentence with the following:

All costs incurred for preparing the TCP, furnishing labor, materials, tools, equipment and incidentals; maintaining, servicing, and removing work area control required for the Work shall be included in the Lump Sum Bid item for "Traffic Control" and no additional compensation shall be allowed therefor.

Add the following subsections:

601-4 Notification and No Parking Signs.

The Contractor shall contact and notify, with printed notices, all residents, businesses and public agencies fronting on, or along, or affected by the proposed work, a minimum of 2 full Days prior to performing any work which will close or partially close the street or which will disallow street parking.

The printed notices shall contain a general description of the work to be done, the location and limits of the work, the day(s) and date(s) that the work is to be done, a statement that the street is to be closed or partially closed to vehicular traffic during construction, and a statement that on-street parking will be prohibited between the hours of 6:00 AM and 5:00 PM on the day(s) of the work as called for on the 'NO PARKING' signs.

The Contractor shall post 'NO PARKING' signs at 50-foot maximum spacing on 1-inch x 2-inch wood stakes along sides of the street, 2 Days in advance of the Work and shall maintain said signs throughout the period of time that will disallow parking.

The 'NO PARKING' sign shall be approximately 14 inches x 22 inches, printed in red letters on a white background, and shall contain information and be laid out as follows:

NO PARKING
TOW-AWAY ZONE
6:00 AM - 5:00 PM

FROM

DAY DATE
TO

DAY DATE
FOR
CONSTRUCTION OF SIDEWALKS
OR CURB OR BOTH
Violators will be Cited and Vehicles Towed
Away at Owners Expense
per

CVC22651L & CVC22654D

Posting of 'NO PARKING' signs on trees, utility poles, fire hydrants or other streetscape features will not be allowed. The signs shall be immediately removed upon completion of the work that disallows parking.

The Contractor shall document the day, date and time that the signs are installed because the No Parking restriction will not be enforced until the signs have been in place 48 hours.

The above described printed notices and signs shall be submitted to the Engineer for review and approval prior to the pre-construction meeting and at least 7 Days before the start of any work.

The Contractor shall make every reasonable effort to arrange with the owners of illegally parking vehicles to remove their vehicles from the street before summoning the police to tow away vehicles.

In addition to the above requirements, the Contractor shall notify the Post Office, Police Department, Fire Department, Water Utility, ambulance service, Dial-a-Ride, school district transportation manager, street sweeping service, trash collection service, and affected utilities, hospitals, schools and governmental agencies a minimum of 2 full calendar days prior to the start of work.

Full compensation for conforming to 7-10.2.2.3 shall be considered as included in the various items of work involved and no additional compensation shall be allowed therefor.